

ABSTRACT

A method of repairing a combustion turbine component having damage located at or near a cooling hole or hollow or geometrically complex portion of the component is provided.

- 5 The method comprises forming a preparatory groove that extends from a surface of the component to the damaged area but does not extend to the cooling hole or hollow or geometrically complex portion of the component, the groove extending 40-90% the distance from the component to the damaged area; spraying a filler material into the groove with a micro-plasma torch at a current of less than 50 amperes; and filling the groove with the filler
- 10 material such that the heated filler material substantially extends from the cooling hole or hollow or geometrically complex portion of the component to a surface of the component.